

**Improving Medication Errors in the Kuwaiti Government Hospitals through Training and  
Clinical Vigilance: Medication Errors in Kuwaiti Government Hospitals**

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## **Improving Medication Errors in the Kuwaiti Government Hospitals through Training and Clinical Vigilance: Medication Errors in Kuwaiti Government Hospitals**

As highlighted in this paper, medication errors are common problems linked with a poor safety culture. Most research studies, which have investigated this matter, have done so from a western perspective (Björkstén et al., 2016). However, there are concerns in Middle East countries regarding the role played by a poor safety culture in causing medication errors. In other words, there is little information about the occurrence and management of medication errors among Middle Eastern countries and more specifically in Kuwait. In addition, few studies have investigated medication errors among Kuwaiti public hospitals. This study seeks to fill this research gap by addressing medication errors in Kuwaiti government hospitals.

In Kuwait, the need to use IT-based tools to manage medical errors is understood by many healthcare administrators but most aspects of their healthcare operations are still reliant on traditional benchmarks of reviewing medication errors, such as establishing mortality committees and manually scrutinising cases (Ali et al., 2018; Janmano et al., 2018). This outcome means that there is a gap between what health administrators know and do concerning medication management. Indeed, it is no longer tenable to rely on traditional techniques of medication management because of the increased sophistication of the country's healthcare system.

Many Kuwaiti hospitals also have inconsistencies in treatment chart reviews, which add to medication errors. Many public hospitals in the country have consistent treatment charts because they have no assigned pharmacist in the ward (most Kuwaiti hospitals do not have an assigned treatment pharmacist) (Nanji et al., 2016). The use of paper-based outpatient discharge prescriptions in such healthcare facilities is also another cause of medication errors because it is

associated with legibility issues, which could cause prescription errors (Ernawati et al., 2014). At the same time, medication review is rarely done in Kuwaiti hospitals. This problem means that there are many missed opportunities for coming up with innovative ways to address the problem. Reconciliation on admission is also poorly undertaken, thereby contributing to the occurrence of medication errors. Research studies that have focused on the human resource component of medication errors also suggest that a poor ratio between nurses, doctors, patients, and pharmacists in Kuwait have also contributed to such mistakes because they lead to capacity constraints in the dispensation of healthcare services (Krzyzaniak & Bajorek, 2016).

According to research, one out of ten patients suffers the negative effects of medication errors in Kuwait. These statistics have attracted a lot of attention to the administrative actions taken by health practitioners as a source of medication errors. A recent report authored by Ali et al. (2018) showed that many victims of medication errors in Kuwait suffered physical pain, which manifested as kidney failure and disabilities. Part of the problem has been the systemic failure of Kuwaiti hospitals to prevent medical practitioners such as trainee doctors to conduct complex medical procedures. Therefore, several stakeholders in the Kuwaiti healthcare sector, including nurses and pharmacists, have identified medication errors as a systemic problem (Ali et al., 2018). Their discussions have led experts to recommend the need to train and educate nursing professionals about strategies to minimise such errors (Krzyzaniak & Bajorek, 2016). Generally, their proposals have been aimed at promoting medication management diligence as a tool for addressing this problem.

Advancements in information technology have been touted as a strategy for addressing medication errors in Kuwait (Hernandez et al., 2015). Particularly, the use of information technology tools in decision-making processes has been highlighted as a reliable technique for

reducing human errors that eventually lead to oversights in the administration of medicine (Smith et al., 2015). Some associated systemic weaknesses of the healthcare system, such as the failure to act on information generated from laboratory tests, have also been touted as problems that could be addressed at source through information technology advancements (Nuckols et al., 2014). They affect the operations of different stakeholders in the healthcare sector, including patients, healthcare professionals, and institutions. These stakeholder groups could experience different effects of medical errors (Nuckols et al., 2014). Therefore, there is no proper framework for implementing proposed strategies for minimising these errors because of the divide between knowing what needs to be done and actually doing it.

The role of a patient safety culture in influencing the incidence of medication errors has been linked with Kuwait-based research studies, which suggest that most Kuwaiti citizens have a poor perception of their hospitals' safety culture (Alqattan et al., 2018). Here, it is important to understand that the perception of patient safety is subject to people's demographic characteristics such as their countries of origin, education levels, professions and age groups (Alqattan et al., 2018). The low perception of safety in Kuwaiti hospitals is linked with increased incidences of medication errors in the country. For example, the Kuwaiti human rights society has registered its concerns regarding the rising cases of medical errors in the country ("KHRS expresses concern," 2018). They attribute the problem to medical negligence ("KHRS expresses concern," 2018). In line with these concerns, the Criminal Evidence General Department, which is domiciled in the country's interior ministry, reported that 450 incidences of medical errors occur monthly. One such incident involved the discharging of a patient who had suffered internal bleeding from an accident by a Kuwaiti doctor who had ruled that internal bleeding had been contained ("KHRS expresses concern," 2018). As a result, the patient died because of the error.

The poor perception of safety in Kuwaiti hospitals contradicts the philosophy of most public healthcare facilities in the country, which suggests that patient safety is a priority in most of the country's public hospitals (Alsaleh et al., 2018). This inconsistency highlights the need to understand the perspective of community pharmacists regarding a culture of safety in Kuwaiti hospitals because they are instrumental in reducing medication errors (Alsaleh et al., 2018). There is also a need to understand staffing requirements in most of public healthcare facilities in Kuwait and their role in reducing work pressures for medical personnel working in the country's public hospitals. The need to understand these factors in the occurrence of medication errors stems from the integral role played by a safety culture in improving the quality of medical services in the country (Ali et al., 2018).

The poor perception of a safety culture has been linked with the high incidences of medication errors in Kuwait (Alsaleh et al., 2018). Comparatively, the management of medication errors in Kuwait is associated with the need to use evidence-based methods when undertaking health tasks. For example, pharmacists in Kuwait have been encouraged to use evidence-based techniques and acquire up-to-date knowledge about their profession to reduce the risk of medication errors (Buabbas et al., 2018). This statement draws attention to the need to change the attitudes of pharmacists regarding their jobs as a tool for reducing medical negligence (Buabbas et al., 2018).

The use of paper-based methods for dispensing medicine in Kuwaiti public hospitals has been criticised for its lack of efficiency in promoting a safe patient safety culture. These criticisms stem from their high levels of susceptibility to human errors. In line with this observation, some medical experts have proposed the need to use information technology tools for pharmaceutical assessment (Buabbas et al., 2018). Different jurisdictions have adopted this

technique based on their unique capabilities. However, in Kuwait, the use of information technology tools to minimise the incidence of medication errors has been characterised by resource limitations, which have made it difficult to effectively use such technologies in all public hospitals (Alsaleh et al., 2018). For example, some healthcare facilities lack adequate funds to purchase customised software to support the integration of advanced information technology software in their regular operations. Therefore, they have to rely on generic IT-based tools to carry out this function. However, generic software has made it difficult to address local aspects of healthcare administration. This reality makes it difficult for such healthcare facilities to avoid medication errors, especially because different hospitals use various electronic prescription programs. Therefore, it is important for healthcare administrators to develop software that appeals to their institutional needs.

The lack of technical skills in Kuwaiti public hospitals to support Information technology integration has also prevented many healthcare practitioners in the country from using electronic prescriptions. This problem is necessitated by the fact that the adoption of some information technology techniques requires advanced knowledge to operate. In a different lens of analysis, the lack of an information technology department in many Kuwaiti public hospitals has also complicated the integration of information technology tools by making it difficult to maintain such systems in the event of a break down. Therefore, it is common to find healthcare administrators refraining from using such systems because of the lack of capacity to maintain them. Lastly, ineffective organisational cultures also impede some healthcare personnel in Kuwait from adopting IT-based tools to manage medication errors (Alsaleh et al., 2018). This limitation stems from the fact that, traditionally, most healthcare functions in the country have been based on manual assessment procedures. The lack of proper training has also made some

healthcare personnel hesitant to use IT-based tools because there is no cultural support to aid its adoption (Alsaleh et al., 2018).

This study will further delve into these issues by understanding the role of information technology tools in managing medication errors in Kuwaiti public hospitals. From a policy perspective, its findings will be instrumental in raising awareness in Kuwait about the need to minimise medication errors and identify strategies to adopt in accomplishing this goal. Overall, this study will help to inculcate a culture of safety in Kuwaiti public hospitals. This statement should be conceived within the greater contextual understanding that the Kuwaiti government has tried to improve its healthcare systems to provide care to its citizens by improving safety standards in most of its public health facilities. Therefore, this study's findings will be integral in creating a safe primary care environment for Kuwaiti citizens because primary care is at the centre of the country's integrated people-centred healthcare system.

By supporting the creation of a safe primary care environment in Kuwait, the findings of this study will also support the United Nations Sustainable Development Goals, which are predicated on the promotion of healthy lifestyles and the improvement of community wellbeing (WHO, 2016). Indeed, by reducing the incidence of medication errors in Kuwait, the primary care environment would become safer. The promotion of a protected primary care environment is paramount to the accomplishment of WHO's sustainability goals because a majority of healthcare services are provided in this environment (WHO, 2016). Furthermore, the magnitude and nature of harm in the primary care environment could have far-reaching implications on Kuwaiti citizens if not effectively addressed (Agu et al., 2014). Therefore, the need to reduce harm in this environment is unparalleled. By increased awareness about the need to manage medication errors in Kuwait, this study's findings would also reduce the incidence of avoidable

hospitalisations that occur because of medication errors. The incidences of disability and death that are associated with such mistakes could also decline when the problem is effectively tackled.

Lastly, the findings of this research could also be useful in informing country-level strategies for improving healthcare systems in Kuwait that influence patient safety and the occurrence of medication errors (Weant et al., 2014). Such proposals would be specific to Kuwaiti public hospitals, meaning that they would provide a basis for comparing the country's performance with those of other jurisdictions to find out better ways of minimising medication errors.



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